polliniferous, 7 mm long (tails 2 mm, sacs 3 mm, appendages 2 mm; filaments glabrous).

BOLIVIA: San Bartolomé (near Calisaya), basin of Río Bopi, Prov. S. Yungas, Dept. La Paz, alt. 750–900 meters, 1–22 July, 1939, *B. A Krukoff* 10266 (type no. 154679–81, herb. U. S. National Arboretum).

Near *Onoseris silvatica* Greenm., of Costa Rica, and not distinguishable in foliage. In *O. silvatica* the pedicels are conspicuously setaceous-bracted above, and the phyllaries are attenuate with (especially in the outer ones) subsetaceous tips. The geographically nearer *O. purpurea* (L. f.) Blake of Colombia is less closely related, the decidedly setaceous-tipped phyllaries being quickly glabrate except for abundant short many-celled usually purplish hairs. The three species constitute a compact group in this multiform genus characterized by their lyrate-pinnatifid leaves and numerous many-flowered, radiate heads.

ORNITHOLOGY.—*Critical notes on the avian genus* Lophortyx.[1] HERBERT FRIEDMANN, U. S. National Museum.

THE GEOGRAPHIC FORMS OF DOUGLAS'S QUAIL, LOPHORTYX DOUGLASII (VIGORS)

Examination of a good series of Douglas's quail, *Lophortyx douglasii*, reveals that there are not two races as currently thought but five.[2] It so happens that all the new forms are fairly southern and are here separated from what has hitherto passed as typical *douglasii*, leaving the northern race *bensoni* undisturbed. The new subspecies, for which none of the names previously proposed in this group seem to be applicable, are as follows:

Lophortyx douglasii teres, n. subsp.

Type.—U.S.N.M. (Biol. Surv. coll.) 155943, adult ♂, collected at Las Palmas, northwestern Jalisco, March 31, 1897, by E. W. Nelson and E. A. Goldman.

Characters.—Similar to *Lophortyx douglasii douglasii* but with shorter wing, 101–104 mm (as opposed to 109–114) in males, 98–102 (as opposed to 105.4–109) in females; with the longest secondaries reaching the tips of the primaries (in *douglasii* the primaries extend 15–20 mm beyond the secondaries) in the closed wing; and with the general coloration darker, the males with the reddish brown on the wings chestnut instead of Sanford's brown (as in *douglasii*), the lower back and rump more brownish; the gray of the breast darker—neutral gray (pale neutral gray in *douglasii*) and the white spots on the abdomen with blackish ringlike edges; the females with the brown on the underparts noticeably darker—dark olive-brown.

Measurements.—Five males, including the type: wing 101–104 (102.6); tail 66–72 (68.6); culmen from base 14–14.5 (14.1); tarsus 25–29 (27.8); middle toe without claw 27–29 (28 mm). Three females: wing 98–102 (99.7); tail 65–67 (66.1); culmen from base 13.8–14.3 (14); tarsus 27.5–29 (28.3); middle toe without claw 26–27 (26.3 mm).

Distribution.—Northwestern Jalisco (Las Palmas; Las Peñas), possibly to Colima. No specimens, however, appear to have been taken yet in Colima. This State is included in current accounts of the range of the species on the sole basis of Grayson's statement, that he "also found it in the State of Jalisco and Colima, but not as far south as Tehuantepec." (In Lawrence's paper, Mem. Boston Soc. Nat. Hist. 2: 306. 1874.)

Lophortyx douglasii impedita, n. subsp.

Type.—U.S.N.M. (Biol. Surv. coll.) 157369, adult ♂, collected at San Blas, Tepic, Nayarit June 9, 1897, by E. W. Nelson and E. A. Goldman.

Characters.—Intermediate between typical *douglasii* and *teres*, combining the dark coloration of the latter with the wing tip of the former; in size it is entirely intermediate. In other words, *impedita* is a dark Douglas's quail with a noticeable wing tip; this combination of characters sets it off from either of its neighbors. As

[1] Published by permission of the Secretary of the Smithsonian Institution. Received September 6, 1943.

[2] I am indebted to the authorities of the American Museum of Natural History, the Museum of Comparative Zoology, and the California Academy of Sciences for the loan of important comparative material, supplementing that available in the collections of the U. S. National Museum and the Fish and Wildlife Service.

a matter of fact, it is even somewhat darker generally than *teres*.

Measurements.—Five males, including the type: wing 105.4–110 (107.9); tail 70–77 (74.2); culmen from base 14–15 (14.5); tarsus 29.5–34.7 (32.3); middle toe without claw 27–30 (28.8 mm). One female: wing 100.5; tail 68; culmen from base 13.5; tarsus 33; middle toe without claw 28 mm.

Distribution.—Known only from Nayarit.

Lophortyx douglasii languens, n. subsp.

Type.—Mus. Comp. Zool. 24975, ad. ♂, collected at Trompa, Chihuahua, January 25, 1885, by R. R. McLeod.

Characters.—Similar to *L. d. douglasii* but with the gray of breast less pure gray, lightly washed with brownish, and with indistinct rufescent medioterminal spots on most of the feathers; and with the pale spots on the abdomen slightly buffier, and the pale posteromedian part of the abdomen slightly more extensive.

Measurement.—Two males: wing 110–111; tail 77.5–79; culmen from the base 15.5–15.8; tarsus 29–30; middle toe without claw 28.5–29.5 mm.

The separation of *teres, impedita,* and *languens* restricts the distributional range of typical *douglasii* to Sinaloa and northwestern Durango (Casa Blanca). The State of Sonora is inhabited by *bensoni.* It may be recalled that van Rossem (Bull. Mus. Comp. Zool., 77 (7): 431–432. 1934) has decided, contrary to some of his own earlier conclusions, that *bensoni* of Sonora and *douglasii* of Sinaloa were not separable and has suggested moving the type locality of *douglasii* from Mazatlan to San Blas. Thus, the resulting *douglasii* of his paper is the bird here described as *impedita,* and his *bensoni* contains both the *bensoni* and the *douglasii* of this paper. It seems to me that he had insufficient grounds for attempting a reinterpretation of the type locality of *douglasii.* What he writes is this: "Regarding Vigors' type of *Ortyx douglasii,* which is in the British Museum; it is doubtful if it ever came from Mazatlan. It is typical, one might say super-typical, of the southern race. The locality as given in the original description was, of course, 'Monterey,' but was later changed by Gambel to Mazatlan. Of course it may have come from Mazatlan, but all things considered, I believe San Blas, Nayarit, to be a better selection. The type is a female, a skin in poor condition and with the tail missing." It would seem from this that it would have been better had van Rossem described the "southern race" as new (equal to my *impedita* plus *teres*) and merely sunk *bensoni* into the synonymy of *douglasii.* However, I can not agree with his conclusion regarding the Sonora-Sinaloa birds either. I find Sonora birds (other than from the extreme southern part of that State) to be distinguishable from Sinaloa examples, and I therefore recognize five races in all.

KEY TO THE RACES OF LOPHORTYX DOUGLASII

a. Breast feathers with a scalloped pattern like those of abdomen (females).
  b. Crest usually uniform dark sepia to fuscous ..... *bensoni,* ♀
  bb. Crest usually spotted or incompletely barred with tawny.
    c. Brown of underparts darker—dark olive-brown.
      d. With a wing tip (i.e., primaries exceeding secondaries) of 15–20 mm..... ..... *impedita,* ♀
      dd. With little or no wing tip.... *teres,* ♀
    cc. Brown of underparts paler—olive-brown to pale olive-brown..... *douglasii,* ♀
aa. Breast feathers uniform gray, not scalloped (males).
  b. Breast very pale—smoke gray, with a faint bluish tinge..... *bensoni,* ♂
  bb. Breast darker—light neutral gray or darker.
    c. Breast feathers mostly with indistinct pale rufescent terminal spots... *languens,* ♂
    cc. Breast feathers mostly with no such spots.
      d. With a wing tip of 15–20 mm.
        e. General coloration averaging darker, gray of breast and abdomen neutral gray, white abdominal spots more or less ringed with blackish..... ..... *impedita,* ♂
        ee. General coloration averaging paler, gray of breast and abdomen light neutral gray, white abdominal spots with no blackish rings..... ..... *douglasii,* ♂
      cc. With little or no wing tip..... *teres,* ♂

A New Race of Gambel's Quail

Gambel's quail reaches its eastern limits in the very arid country of extreme western Texas, in the region about El Paso east to Jeff Davis County. A series of birds from

this area are consistently different in coloration from a long series of the typical race, from southern California, Arizona, Utah New Mexico, and extreme northwestern Mexico, and appear to be a recognizable race, which may be known as—

Lophortyx gambelii ignoscens, n. subsp.

Type.—U.S.N.M. 9363, adult, unsexed (but male by plumage), collected at San Elezario, Texas, December 1855, by Dr. C. B. Kennerly.

Characters.—Similar to *Lophortyx gambelii gambelii* but with the long feathers of the sides and upper flanks lighter in color—between Sanford's brown and chestnut (while in the nominate race these feathers are between chestnut and bay in color) and somewhat paler generally, especially so on the crown, breast, and back.

As in the other races of this species the amount of buffy color on the abdomen can be appreciated only in birds with fairly fresh plumage, as the color seems to bleach out to whitish, even in such a saturated buffy race as *fulvipectus*. The type of *ignoscens* is a bird in fairly fresh plumage; the rest of my specimens of this form are in bleached worn plumage, but the color of the elongated chestnut feathers is quite the same in all. There is no size difference between *ignoscens* and *gambelii*.

Range.—The extremely dry desert region, sometimes called the "eastern succulent desert" from Fort Fillmore, N. Mex., east to extreme western Texas—El Paso, Belen, San Elezario, and Fort Hancock—east to Presidio del Norte and to the Limpia River, Jeff Davis County.It does not extend farther eastward into Brewster County, and apparently does not go southward into adjacent areas of Mexico, but is limited to the area of low rainfall (under 10 inches a year). Thus, a male from Cajon Bonito Creek, Chihuahua, is *gambelii*. Similarly, in New Mexico its range is restricted to this very arid little belt. Specimens typical of *gambelii* in every way have been examined from the following localities in fairly nearby parts of southern New Mexico: Fort Bayard, Frisco, Garfield, Gila National Forest, Grafton, Joseph, Silver City, and near Tyrone. These indicate that the country to the north of this "eastern succulent desert" is inhabited by *gambelii*. A bird from the San Luis Mountain, just within the more arid region, is paler, and agrees with *ignoscens*.

The characters of *ignoscens* appear to be more pronounced in males than in females, although it must be admitted I have but three females of the new form for study. Two females from Cajon Bonito Creek, northern Chihuahua, are very similar to them, but the male from that locality is definitely *gambelii*. It may be that the two forms intergrade in the area around Cajon Bonito Creek.

Of the new race *ignoscens* I have seen eight males and three females.

ZOOLOGY.—*A new snake of the genus* Tropidodipsas *from Mexico.*[1] HOBART M. SMITH, University of Rochester. (Communicated by HERBERT FRIEDMANN.)

Among the snakes secured by Thomas MacDougall during the winter of 1941–42 on the Isthmus of Tehuantepec is one belonging to the section of *Tropidodipsas* characterized by the very short head, small posterior chinshields, and small eye. It does not agree with either subspecies of *sartorii* now recognized, the only other members of this section of the genus known from Mexico. I am indebted to Dr. E. H. Taylor for permission to describe it.

Tropidodipsas macdougalli, n. sp.

Type.—E. H. Taylor–H. M. Smith collection No. 28088, from Tehuantepec, Oaxaca, colert," lected by Thomas MacDougall during January, 1942.

Diagnosis.—Related to *T. sartorii*. Dorsal scales in 17 rows, absolutely smooth throughout length of body; black bands 27 on body, 9 on tail, generally a little more than twice length of light interspaces; ventrals 199; caudals 65, in a female; eye diameter about equal to its distance from labial border; head relatively short; posterior chinshields very small.

Description.—Head somewhat mutilated. Internasals a little less than half area of prefrontals, their common suture about two-thirds length of common median suture of prefrontals; length of sutures between rostral and internasals about equal to length of sutures between

[1] Received September 15, 1943.